What is claimed is:

1. A selective noise generation system, comprising:

a delta-sigma modulator that receives digital input and produces a digital output;

a digital-to-analog converter (DAC) that converts the digital output into an analog output comprising quasi-random noise having at least one low noise frequency band, the at least one low noise frequency band having respective associated shapes and center frequencies; and

a frequency control that controls the delta-sigma modulator to alter one of the respective center frequency and the shape of the at least one low noise frequency band.

2. The system of claim 1, further comprising a frequency synthesizer that drives at least one of the delta-sigma modulator and the DAC, the frequency control controlling the frequency synthesizer to alter respective center frequencies of the at least one low noise frequency band associated with the analog output.

3. The system of claim 1, the delta-sigma modulator comprising at least one register and the frequency control being operative to alter at least one scalar value associated with the at least one register to change respective widths of the at least one low noise frequency band associated with the analog output.

4. The system of claim 1, the delta-sigma modulator comprising at least one register and the frequency control being operative to alter at least one scalar value associated with the at least one register to change the shape of the at least one low noise frequency band associated with the analog output.

5. The system of claim 1, further comprising a tunable filter having at least one passband having a center frequency, the frequency control being operative to vary the center frequency and the width of the at least one passband.

6. The system of claim 5, the tunable filter comprising a surface acoustic wave (SAW) filter.

7. The system of claim 5, the tunable filter comprising at least one micromechanical structure that can be electrically configured to change the center frequency of the at least one passband associated with the filter.

8. The system of claim 1, the analog output being a radio frequency signal.

9. The system of claim 1, the digital input comprising dither noise.

10. The system of claim 1, the digital input comprising at least one signal of interest.

11. An amplifier testing system comprising the noise generation system of claim 1.

12. The amplifier testing system of claim 11, further comprising:

at least one amplifier that amplifies the analog output to provide an amplified signal; and

a testing apparatus that analyzes the amplified signal at the at least one low noise frequency band to characterize the behavior of the amplifier.

13. The amplifier testing system of claim 12, the testing apparatus characterizing a linearity property associated with the at least one amplifier.

14. The amplifier testing system of claim 12, the analog output comprising at least one test carrier in the at least one low noise frequency band, and the testing apparatus characterizing an intermodulation distortion associated with the at least one amplifier.

15. The amplifier testing system of claim 14, the testing apparatus characterizing an adjacent channel power ratio associated with the at least one amplifier.

16. The amplifier testing system of claim 14, the testing apparatus further characterizing a linearity property associated with the at least one amplifier.

17. A transmitter assembly comprising the noise generation system of claim 1.

18. The assembly of claim 17, the analog output of the DAC comprising a radio frequency signal.

19. The assembly of claim 18, the transmitter comprising at least one amplifier that amplifies the radio frequency signal to provide an amplified signal.

20. The assembly of claim 19, the at least one amplifier comprising at least one switching amplifier.

21. The assembly of claim 17, the frequency control being operative to alter the center frequency of the at least one low noise frequency band in real time, and the transmitter employing a frequency hopping scheme for transmission.

22. An assembly, comprising:

means for producing an analog signal comprising a wide frequency band of noise encompassing a low noise frequency band, having an associated shape and center frequency; and

means for controlling the means for producing to alter the shape and center frequency of the low noise frequency band.

23. The assembly of claim 22, further comprising means for filtering the analog signal, the means having associated frequency characteristics, and the means for controlling being operative to alter the frequency characteristics of the means for filtering.

24. The assembly of claim 22, further comprising:

means for amplifying the analog signal to provide an amplified signal; and

means for evaluating the amplifier according to at least one characteristic of the amplified signal.

25. The assembly of claim 22, the means for producing an analog signal comprising means for providing a desired signal within the low noise frequency band.

26. The assembly of claim 22, further comprising means for transmitting the analog signal as a radio frequency signal.

27. A method of selectively generating noise within a frequency range, comprising:

quantizing a digital input, having a first word size, to produce a digital output signal having a second word size, the first word size being larger than the second word size;

processing the digital input as to distribute noise associated with quantizing the digital signal across the frequency range, such that the quantization noise is spread across at least one frequency band of quasi-random noise and is substantiality reduced in at least one low noise frequency band, the at least one low noise frequency band having associated frequency characteristics;

converting the quantized digital output signal into an analog signal; and

altering the frequency characteristics of the at least one low noise frequency band.

28. The method of claim 27, further comprising transmitting the analog signal, including the at least one frequency band of quasi-random noise.

29. The method of claim 28, further comprising providing at least one desired signal in the at least one low noise frequency band.

30. The method of claim 28, further comprising periodically altering the frequency characteristics of the at least one low noise frequency band during the transmitting of the analog signal.

31. The method of claim 27, further comprising:

amplifying the analog signal at a candidate amplifier to produce an amplified signal; and

evaluating the amplified signal to determine one or more characteristics of the candidate amplifier.

32. The method of claim 27, wherein evaluating the amplified signal includes determining a signal level associated with the at least one low noise frequency band.

33. The method of claim 27, wherein evaluating the amplified signal includes determining a noise power ratio between selected one of the at least one low noise frequency bands and a frequency band adjacent to the selected low noise frequency band.

34. The method of claim 27, wherein evaluating the amplified signal includes measuring a spectral regrowth of a desired signal within the at least one low noise frequency band.